# **NextGen City Pairs - Southern California**

When a traveler starts to plan a trip or when an airline operator starts to plan air service, they will look at the points of origin and destination for flights. These points of origin and destination are thought of in terms of pairs of cities or pairs of metroplexes. In measuring city-pair performance, the NPS website looks at flights that either originate or conclude at a specific metroplex, such as the New York/Philadelphia metroplex to Southern California. For each city pair, an origin airport (for example, Newark Liberty International, EWR) and a destination airport (for example, Los Angeles International, LAX) are listed. The city pairs are unidirectional (only measuring EWR to LAX in the example above) and the NPS website reports them as recommended by the NextGen Advisory Committee (NAC).

All results are reported by Fiscal Year (FY), October 1 — September 30.

Flights can depart outside of the reportable hours, but must arrive during the reportable hours at the destination airport. For a list of the reportable hours for each airport, please see the Reference Guide.

Average Airborne Time (FY)

This metric is measured as Minutes

During reportable hours at the destination airport, the average Airborne Time for flights between the selected city pair. The reportable hours vary by airport and the results are reported by fiscal year. Additional reportable hour information can be found in the airport information section of the Reference Guide.

Origin	Destination	2009	2010	2011	2012	2013	2014
DEN	LAX	120.7	120.9	121.9	118.9	119.3	119.6
DFW	LAX	168.1	168.3	169.0	167.6	169.2	170.4
EWR	LAX	328.2	326.2	328.7	323.9	323.0	330.6
LAS	LAX	42.5	42.6	42.9	42.6	42.4	42.3
LAS	SAN	45.6	45.4	45.9	45.4	45.2	44.9
LAX	PHX	58.9	58.5	58.8	59.2	58.5	58.3
LAX	SFO	56.7	57.3	56.7	55.7	56.2	55.6
PHX	SAN	51.0	51.0	51.0	50.6	50.4	50.4
SAN	SFO	69.6	70.4	69.4	68.1	68.6	68.3

Effective Gate-to-Gate Time (FY)

This metric is measured as Average Minutes per Flight

During reportable hours at the destination airport, the difference between the Actual Gate-In Time at the destination airport and the Scheduled Gate-Out Time at the origin airport. Flights may depart outside reportable hours, but must arrive during them. The reportable hours vary by airport and the results are reported by FY.

Origin Destination	2009	2010	2011	2012	2013	2014	
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DEN	LAX	153.2	151.8	153.2	151.8	158.2	158.0
DFW	LAX	204.9	206.8	205.8	202.9	207.5	209.4
EWR	LAX	383.5	371.5	373.7	373.5	369.4	377.8
LAS	LAX	72.3	74.0	75.3	74.6	76.8	78.6
LAS	SAN	71.3	70.2	73.8	69.5	73.2	77.7
LAX	PHX	82.8	82.9	87.1	85.3	85.6	89.2
LAX	SFO	90.2	92.1	93.7	96.0	97.5	91.7
PHX	SAN	75.0	74.3	76.7	72.5	74.6	79.0
SAN	SFO	104.1	105.1	105.5	106.6	107.2	105.3

## Airborne Distance (FY)

This metric is measured as Nautical Miles

During reportable hours at the destination airport, the average airborne distance of flights between the selected city pair. The reportable hours vary by airport and the results are reported by fiscal year. Additional reportable hour information can be found in the airport information section of the Reference Guide.

Origin	Destination	2009	2010	2011	2012	2013	2014	
DEN	LAX	1	1	759.9	761.2	760.5	759.5	
DFW	LAX	1	1	1095.8	1094.0	1093.8	1093.1	
EWR	LAX	1	1	2176.2	2171.9	2176.4	2177.3	
LAS	LAX	1	1	226.2	226.9	226.4	226.6	
LAS	SAN	1	1	250.9	251.0	250.5	250.6	
LAX	PHX	1	1	361.4	359.2	358.7	359.1	
LAX	SFO	1	1	320.1	317.8	318.2	316.1	
PHX	SAN	1	1	281.2	282.2	280.9	280.9	
SAN	SFO	1	1	406.1	404.2	404.4	402.7	
<sup>1</sup> No dat	<sup>1</sup> No data available.							

#### Efficiency:

As described by ICAO, efficiency addresses the operational and economic cost-effectiveness of gate-to-gate flight operations from a single-flight perspective. In all phases of flight, airspace users want to depart and arrive at the times they select and fly the trajectory they determine to be optimum.

Airborne Time Predictability (FY)

This metric is measured as Minutes

During reportable hours at the destination airport, the difference between the 85<sup>th</sup> and 15<sup>th</sup> percentiles of Airborne Time for flights between the selected city pair. The reportable hours vary by airport and the results are reported by FY. Additional reportable hour information can be found in the airport information section of the Reference Guide.

Origin	Destination	2009	2010	2011	2012	2013	2014
DEN	LAX	17	16	18	14	15	14
DFW	LAX	21	20	23	21	24	20
EWR	LAX	38	32	41	36	37	35
LAS	LAX	5	5	6	5	5	5
LAS	SAN	7	5	6	5	5	5
LAX	PHX	8	7	7	6	7	6
LAX	SFO	12	13	12	9	10	9
PHX	SAN	6	6	7	7	7	6
SAN	SFO	14	13	13	10	11	10

Effective Gate-to-Gate Time Predictability (FY)

This metric is measured as Minutes

During reportable hours, the difference between the 85<sup>th</sup> and 15<sup>th</sup> percentiles of the Effective Gate-to-Gate Time metric. The reportable hours vary by airport and the results are reported by FY. Additional percentile and reportable hour information can be found in the Reference Guide.

Origin	Destination	2009	2010	2011	2012	2013	2014
DEN	LAX	40	35	40	33	44	45
DFW	LAX	42	44	43	39	44	41
EWR	LAX	63	52	59	61	61	58
LAS	LAX	30	32	34	30	34	38
LAS	SAN	31	27	31	25	32	40
LAX	PHX	24	24	28	28	28	32
LAX	SFO	58	60	60	64	63	49
PHX	SAN	28	27	31	23	27	34
SAN	SFO	59	59	58	62	60	54

### **Predictability:**

As described by ICAO: Predictability refers to the ability of airspace users and ATM service providers to provide consistent and dependable levels of performance.

# **Core Airports within Southern California Metroplex**

LAX

Los Angeles International Airport

SAN

San Diego International Airport